

FILE 'HOME' ENTERED AT 12:13:37 ON 13 JUN 2006

10621,412 .

=> file biosis medline caplus wpids uspatfull
COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
0.21	0.21

FULL ESTIMATED COST

FILE 'BIOSIS' ENTERED AT 12:14:22 ON 13 JUN 2006
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*** YOU HAVE NEW MAIL ***

=> s purif? (4a) RNA
L1 23672 PURIF? (4A) RNA

=> s l1 and (cellulose or acetylcellulose or triacetylcellulose or cellulose acetate)
L2 5843 L1 AND (CELLULOSE OR ACETYLCCELLULOSE OR TRIACETYLCCELLULOSE OR
CELLULOSE ACETATE)

=> s l2 and solid phase
L3 2744 L2 AND SOLID PHASE

=> s l3 and beads
L4 1878 L3 AND BEADS

=> s l4 and surfactant
L5 485 L4 AND SURFACTANT

=> s l5 and adsorbing
L6 7 L5 AND ADSORBING

=> s l6 and desorbing
L7 1 L6 AND DESORBING

=> d l1 bib abs

L1 ANSWER 1 OF 23672 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on
STN
AN 2006:305454 BIOSIS
DN PREV200600299724
TI Identification of a putative mitochondrial RNA polymerase from Physarum
polycephalum: characterization, expression, purification, and
transcription in vitro.
AU Miller, Mara L.; Antes, Travis J.; Qian, Fang; Miller, Dennis L. [Reprint
Author]
CS Univ Texas, Dept Cell and Mol Biol, 2601 N Floyd Rd, Richardson, TX 75080
USA
dmiller@utdallas.edu
SO Current Genetics, (APR 2006) Vol. 49, No. 4, pp. 259-271.
CODEN: CUGED5. ISSN: 0172-8083.
DT Article
LA English
ED Entered STN: 7 Jun 2006
Last Updated on STN: 7 Jun 2006
AB Mitochondrial RNA polymerases (mtrNAPs) are necessary for the biogenesis

of mitochondria and for proper mitochondrial function since they transcribe genes on mtDNA for tRNAs, rRNAs, and mRNAs. The unique type of RNA editing identified in mitochondria of *Physarum polycephalum* is thought to be closely associated with transcription, and as such, RNA editing activity would be expected to be closely associated with the mtrNAP. In order to better characterize the role of mtrNAPs in mitochondrial biogenesis and to determine the role of the *Physarum* mtrNAP in RNA editing, the cDNA of the *Physarum* mtrNAP was identified using PCR and degenerate primers designed from conserved motifs in mtrNAPs. This amplification product was used to screen a cDNA library for the cDNA corresponding to the *Physarum* mtrNAP. A cDNA corresponding to a 3.2 kb transcript containing a 997 codon open reading frame was identified. The amino acid sequence inferred from the open reading frame contains motifs characteristic of mtrNAPs. To confirm that a cDNA for an RNA polymerase had been isolated, the cDNA was expressed in *E. coli* as an N-terminal maltose binding protein (MBP) fusion protein. The fusion protein was purified by affinity chromatography and shown to have DNA-directed RNA polymerase activity. This functional mtrNAP will be useful for in vitro studies of mitochondrial transcription and RNA editing.

=> d his

(FILE 'HOME' ENTERED AT 12:13:37 ON 13 JUN 2006)

FILE 'BIOSIS, MEDLINE, CAPLUS, WPIDS, USPATFULL' ENTERED AT 12:14:22 ON 13 JUN 2006

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L1      23672 S PURIF? (4A) RNA
L2      5843 S L1 AND (CELLULOSE OR ACETYLCELLULOSE OR TRIACETYLCELLULOSE OR
L3      2744 S L2 AND SOLID PHASE
L4      1878 S L3 AND BEADS
L5      485 S L4 AND SURFACTANT
L6       7 S L5 AND ADSORBING
L7       1 S L6 AND DESORBING
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=> s l3 and adsorbing

```
L8      66 L3 AND ADSORBING
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=> s l8 and desorbing

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L9       4 L8 AND DESORBING
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=> dup rem l9

PROCESSING COMPLETED FOR L9

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L10      4 DUP REM L9 (0 DUPLICATES REMOVED)
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=> d l10 bib abs 1-4

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L10  ANSWER 1 OF 4  CAPLUS  COPYRIGHT 2006 ACS on STN
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AN   2005:402693  CAPLUS
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DN   142:426392
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```
TI   Separating and purifying nucleic acid with nucleic acid-adsorbing
      porous membrane of cellulose derivative
```

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IN   Kyono, Yoshiki; Makino, Yoshihiko
```

```
PA   Fuji Photo Film Co., Ltd., Japan
```

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SO   Jpn. Kokai Tokkyo Koho, 24 pp.
```

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      CODEN: JKXXAF
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DT   Patent
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LA   Japanese
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FAN.CNT 1
```

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2005118017	A2	20050512	JP 2003-359901	20031020
PRAI	JP 2003-359901		20031020		

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AB   A method and apparatus for purification of nucleic acids via adsorption are
      disclosed. The nucleic acids purification unit consists of a nucleic acid
      separation purification cartridge equipped with a nucleic acid-adsorbing
      porous membrane, container which possesses at least 2 openings containing the
      nucleic acid-adsorbing porous membrane, and pressure difference
      generator attached to one of the openings. The method comprises the steps
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of: (1) **adsorbing** the nucleic acid to the **solid phase** by allowing a sample solution containing the nucleic acid to come into contact with the nucleic acid-**adsorbing solid phase**; (2) washing the **solid phase** by allowing a washing solution to come into contact with the **solid phase**, while the nucleic acid is adsorbed to the **solid phase**; and (3) **desorbing** the nucleic acid from the **solid phase** by allowing a recovering solution to come into contact with the **solid phase**. Also part of the apparatus are a container, and a device for creating pressure gradient such pump. The porous membrane is made of **cellulose** derivative that dissolves within 48 h, but not in 1 h, when soaked in 5mL trifluoroacetic acid, or dissolves within 1 h when soaking in trifluoroacetic acid, but not within 24 h in dichloro-methane 5mL. A mixed porous membrane of **triacetylcellulose** and **biacetyl cellulose** was successfully used to **purify** DNA and **RNA**.

L10 ANSWER 2 OF 4 USPATFULL on STN

AN 2005:131196 USPATFULL

TI Method for isolating and purifying nucleic acid, cartridge for isolating and purifying nucleic acid, and kit isolating and purifying nucleic acid

IN Iwaki, Yoshihide, Asaka-shi, JAPAN

PA Fuji Photo Film Co., Ltd., Minami-Ashigara-shi, JAPAN (non-U.S. corporation)

PI US 2005112656 A1 20050526

AI US 2004-974681 A1 20041028 (10)

PRAI JP 2003-371783 20031031

JP 2004-293641 20041006

DT Utility

FS APPLICATION

LREP BIRCH STEWART KOLASCH & BIRCH, PO BOX 747, FALLS CHURCH, VA, 22040-0747, US

CLMN Number of Claims: 38

ECL Exemplary Claim: 1

DRWN 1 Drawing Page(s)

LN.CNT 1834

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention provides a method for isolating and purifying nucleic acids, which comprises: (1) passing a sample solution containing a nucleic acid through a nucleic acid **adsorbing** porous membrane to adsorb the nucleic acid to the nucleic acid **adsorbing** porous membrane; (2) passing a washing solution through the nucleic acid **adsorbing** porous membrane to wash the nucleic acid **adsorbing** porous membrane while **adsorbing** the nucleic acid; and (3) passing an elution solution through the nucleic acid **adsorbing** porous membrane to desorb the nucleic acid from the nucleic acid **adsorbing** porous membrane, wherein the nucleic acid **adsorbing** porous membrane is a porous membrane capable of **adsorbing** the nucleic acid by interaction involving substantially no ionic bond, and a step of drying the nucleic acid **adsorbing** porous membrane **adsorbing** the nucleic acid is not included between the washing step (2) and the recovering step (3).

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 3 OF 4 USPATFULL on STN

AN 2005:111547 USPATFULL

TI Method for separation and purification method of nucleic acid

IN Komazawa, Hiroyuki, Saitama, JAPAN

Iwaki, Yoshihide, Saitama, JAPAN

Makino, Yoshihiko, Saitama, JAPAN

Amano, Yoshikazu, Saitama, JAPAN

PI US 2005095626 A1 20050505

AI US 2004-932138 A1 20040902 (10)

PRAI JP 2003-311335 20030903

JP 2003-312147 20030904

DT Utility

FS APPLICATION

LREP BIRCH STEWART KOLASCH & BIRCH, PO BOX 747, FALLS CHURCH, VA, 22040-0747,
US

CLMN Number of Claims: 28

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 952

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention provides a rapid, convenient, and automatable method for extracting a highly pure nucleic acid in order to carry out nucleic acid analysis smoothly with high accuracy in an array method. An analyzing method includes analyzing a nucleic acid by an array method, the nucleic acid being separated and purified by a separation and purification method which includes the steps of (a) to (f) identified in the specification.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 4 OF 4 USPATFULL on STN

AN 2004:76592 USPATFULL

TI Method for separating and purifying a nucleic acid

IN Mori, Toshihiro, Asaka-shi, JAPAN

Makino, Yoshihiko, Asaka-shi, JAPAN

PI US 2004058370 A1 20040325

AI US 2003-621412 A1 20030718 (10)

PRAI JP 2002-210833 20020719

DT Utility

FS APPLICATION

LREP BIRCH STEWART KOLASCH & BIRCH, PO BOX 747, FALLS CHURCH, VA, 22040-0747

CLMN Number of Claims: 18

ECL Exemplary Claim: 1

DRWN 3 Drawing Page(s)

LN.CNT 951

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB An object of the present invention is to provide a method for separating and purifying a nucleic acid by **adsorbing** the nucleic acid in a test sample to a surface of a **solid phase** and **desorbing** the nucleic acid by washing and the like. The present invention provides a method for separating and **purifying** **RNA** from a nucleic acid mixture, comprising a step of: **adsorbing** and **desorbing** a nucleic acid in the nucleic acid mixture containing RNA and DNA to and from a **solid phase** of an organic macromolecule.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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